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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,331	11/30/2004	Wan Shik Chae	31758-210506	3046
26694	7590	10/27/2006	EXAMINER	
VENABLE LLP			CAJILIG, CHRISTINE T	
P.O. BOX 34385			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20043-9998			3637	

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/516,331	CHAE, WAN SHIK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christine T. Cajilig	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 November 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 November 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>11/30/04</u> .	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

The information disclosure statement filed November 30, 2004 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

***Drawings***

Figures 1-3b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure. The phrases "the present invention" and "comprising" should be omitted.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The specification is objected to because there is no notice of Related Applications for the Foreign Application being claimed.

**Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

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(g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

(k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual

Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

(I) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

The disclosure is objected to because of the following informalities: Lines 14-18 on page 8 states that the length L1 is set to be less than the length L2. However, Figure 5 shows that L1 has a length longer than L2.

Appropriate correction is required.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: The word "approached" on line 6 of page 2 should read as "—approach—". Appropriate correction is required.

Claim 3 is objected to because of the following informalities: A space should be provided between projection and 32 on line 11. Appropriate correction is required.

Claims 3 and 4 are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so

as to avoid confusion with other numbers or characters which may appear in the claims.  
See MPEP § 608.01(m).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the projections" in line 3 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the insertion groove" in line 4 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the assembling portion" in line 11 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 is further indefinite because of the use of "/" between long and short in line 4. Does the Applicant intend for the "/" to mean "long and short edge" or "long or short edge?"

Claim 1 is further indefinite because the panels, which are described in the preamble of the claim, are not positively recited. However, the body of the claim recites other limitations of the invention in terms of the panels. For purposes of examination,

the Examiner interprets the limitations as being "adapted to" or "capable of" being positioned in such a relationship with the panels.

Claim 2 recites the limitation "the first hook groove" in line 14 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the second hook groove" in line 15 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the attachment surface" in line 19 of page 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the upper direction" in line 2 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the rectangular direction" in line 2 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the other panel" in line 1 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the rectangular direction" in line 2 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 is indefinite because of the use of the word "it" in lines 17 of page 14. To what limitation does the word "it" refers?

Claim 2 is further indefinite because of the use of "/" between long and short in line 14. Does the Applicant intend for the "/" to mean "long and short edge" or "long or short edge?"

Claim 2 is further indefinite because the panels, which are described in the preamble of the claim, are not positively recited. However, the body of the claim recites other limitations of the invention in terms of the panels. For purposes of examination, the Examiner interprets the limitations as being "adapted to" or "capable of" being positioned in such a relationship with the panels.

Claim 3 recites the limitation "the first and second support grooves" in lines 8-9 of page 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the horizontal direction" in line 16 of page 15. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Chiu-Ying (U.S. Patent No. 6,564,522 B1) (herein referred to as Chiu-Ying '522).

Regarding claim 1, Chiu-Ying '522 in Figure 6 discloses a floor system with long flat shaped panels (10) with two long edges and two short edges, and the projections (11, Col 2, Ln 25-30) provided on one side of long and short edge and the insertion

groove (13, Col 2, Ln 25-30) on another side of long and short edge, which are inserted and fitted into the insertion grooves so that the panels are sequentially assembled (Col. 2, Ln 25-31). Chiu-Ying '522 further discloses that the panels are flexibly assembled by using elastic force via elastic member (29) so that the assembling portion between assembled panels is adhered closely (Col. 2, Ln 64-67). The method comprising steps of inserting the projections of the panel into the insertion grooves of another panel, and; assembling them flexibly by using elastic force with elastic member so that the assembling portion between assembled panels is adhered closely would be inherently anticipated by assembling the structure set forth by the invention of Chiu-Ying '522 as shown in Figure 6.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu-Ying '522 in view of Gronau et al. (U.S. Patent No. 4,856,250).

Regarding claim 2, Chui-Ying '522 in Figures 5 and 6 discloses a floor assembly comprising a plurality of attachment panels (20) which has a hook projection (21) adapted to engage a first hook groove of a panel and a second groove of another panel, and which is projected in the upper direction (direction upward and away from the

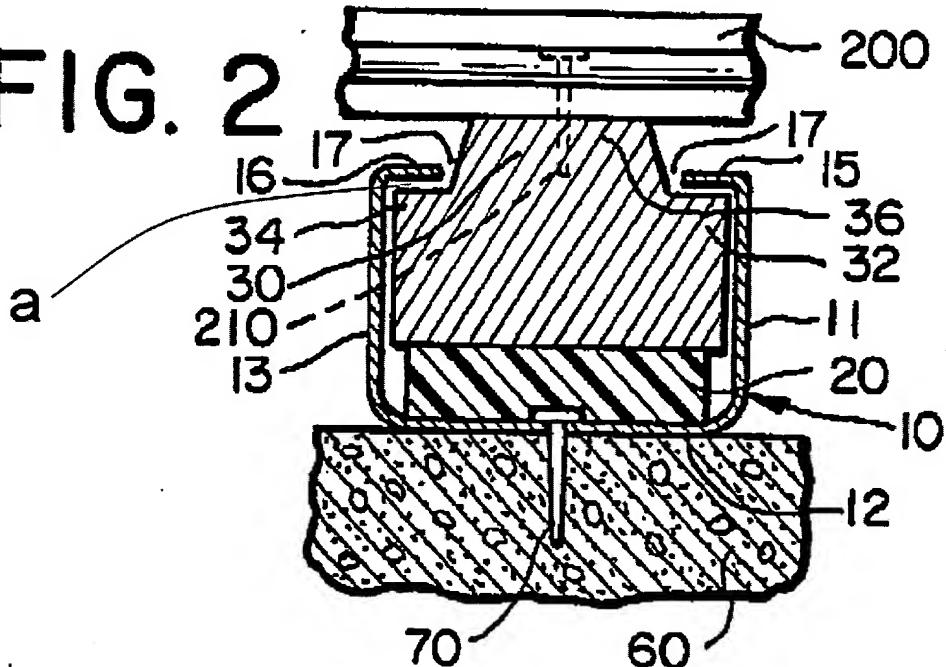
surface 30) and formed in a rectangular direction (perpendicular direction) to the longitudinal direction (the direction parallel to and along the long wall of the panel 20); and an elastic member (29) arranged elastically between an attachment panel and an adjacent attachment panel (as shown in Figure 6) in order to have both hook projections approach each other by the elastic restoring force, but does not disclose a long shaped rail with a lower surface, which is placed on the attachment surface for attaching the panel, an upper surface on which the panel is mounted, and a guide groove in the longitudinal direction wherein a plurality of attachment panels are guided in the guide groove and installed movably in the longitudinal direction of the rail.

However, Gronau et al. in Figure 2 discloses a long shaped rail (10) with a lower surface (12), which is placed on an attachment surface (60) for attaching a panel (200), an upper surface (15) on which the panel (200) is mounted, and a guide groove (a) in the longitudinal direction (the direction parallel to and along the side walls 11 and 13 of the rail 10) wherein an attachment panel (30) is guided in the guide groove (a) and installed movably in the longitudinal direction of the rail (10). Chiu-Ying '522 and Gronau et al. are analogous because both are in the same field of endeavor of floor systems. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor assembly of Chiu-Ying '522 to include a long shaped rail with a lower surface, which is placed on an attachment surface for attaching a panel, an upper surface on which the panel is mounted, and a guide groove in the longitudinal direction wherein an attachment panel is guided in the guide groove and installed movably in the longitudinal direction of the

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rail as taught by Gronau et al. to provide a guide way to allow an attachment panel to move in response to dimensional changes in the flooring material (Col 2, Ln 36-41).

# FIG. 2



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Gronau et al. (U.S. Patent No. 4,856,250)

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu-Ying '522 in view of Gronau et al. as applied to claim 2 above, and further in view of Chiu-Ying (U.S. Patent No. 6,619,000) (herein referred to as Chiu-Ying '000).

Regarding claim 3, Chiu-Ying '522 already modified by Gronau et al. discloses a floor assembly as discussed above and further discloses that a first support groove (16) is formed in the longitudinal direction (the direction parallel to and along the sides 11 and 13 of the panel) on the bottom of the panel (10), and that a support projection (22) is formed on the attachment panel (20) in the same direction of the hook projection (21),

into which the first support groove (16) is inserted, but does not disclose that a second support groove is formed in the longitudinal direction on the bottom of the panel, and that a support projection is formed on the attachment panel in the same direction of the hook projection, into which the second support groove is inserted. However, Chiu-Ying '000 discloses a panel (10) with a second support groove (18) formed in the longitudinal direction (the direction parallel to and along the sides 12 and 13 of the panel) on the bottom of the panel (10), and an attachment panel (20) with a support projection (22) formed on the attachment panel (20) in the same direction of the hook projection (21), into which the second support groove (18) is inserted. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor assembly of Chiu-Ying '522 already modified by Gronau et al. to include a second support groove formed in the longitudinal direction on the bottom of the panel, and a support projection formed on the attachment panel in the same direction of the hook projection, into which the second support groove is inserted as taught by Chiu-Ying '000 to further secure the panel. Furthermore, it has been held that a mere duplication of parts, such as the duplication of the grooves and support projections, has no patentable significance unless a new and unexpected result is produced. A duplication of parts is generally recognized as being within the level of ordinary skill in the art. *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1955).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu-Ying '522 in view of Gronau et al. and Chiu-Ying '000 as applied to claim 3 above, and further in view of Ehr Gott (U.S. Patent No. 6,364,141 B1).

Regarding claim 4, Chiu-Ying '522 already modified by Gronau et al. and Chiu-Ying '000 discloses a floor assembly but does not disclose that a fixing blade extended from the bottom surface of the rail in the horizontal direction is formed and a plurality of fixing holes are formed on the fixing blade at fixed interval. However, Ehr Gott in Figure 4 discloses a rail (a) including a fixing blade (140) extended from the bottom surface (b) of the rail in the horizontal direction (direction perpendicular to the length of the rail) formed and a plurality of fixing holes (144) are formed on the fixing blade (140) at fixed intervals. Therefore, it would have been obvious for a person having ordinary skill in the arts at the time of the Applicant's invention to modify the floor assembly of Chiu-Ying '522 already modified by Gronau et al. and Chiu-Ying '000 to include a fixing blade extended from the bottom surface of the rail in the horizontal direction formed and a plurality of fixing holes are formed on the fixing blade at fixed interval as taught by Ehr Gott to secure a rail into a support surface.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee (U.S. Patent No. 6,550,206) a deformable support for floor panels; He (U.S. Patent No. 6,857,242) a floor assembly with locking biases locking clips.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Cajilig whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday - Friday from 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571)272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTC *TC*  
10/20/06

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